

Fig 1: *Synotis alatus* (Wall. ex DC.) Jeffrey

at Twang near the forest road. Upon consulting literature, I found that the species *Synotis alatus* had neither been

reported nor collected from this region to date (Kanjilal *et al.* 1934-1940; Hajra *et al.* 1995). Hence, this is a new record for the state of Arunachal Pradesh.

The description along with a line diagram (Fig. 1) of its habit, habitat, flowering and fruiting time, and distribution of the taxon in India have been elaborated.

***Synotis alatus*:** (Wall. ex DC.) Jeffrey & Chen, Y.L. in Kew Bull. 39 (2): 308. 1984. (Asteraceae); Hajra *et al.* Fl. of India 13: 287, 1995. *Senerio alatus* Wall. ex DC.; Hook. f., Fl. Brit. India 3: 353, 1881.

A perennial grey tomentose rhizomatous herb, up to 80 cm long, stout, rhizome woody. Leaves subrosulate, ovate-oblong, sessile, acute-acuminate, base sub-auriculate, 12-19x7-9cm, hairy beneath, uppermost leaves smaller in size at base, sessile. Head yellow, inconspicuously radiate, c. 5-7 cm long, involucre cylindrical, densely hairy; bracts 5-7, linear-lanceolate, 7x1 mm. Ray florets 2-3, 2-3 mm long, unequal, shorter than styles; disc florets c. 4 mm long. Achenes greyish, c. 1 mm long, pubescent; pappus of pale, scarbid hairs, c. 4.5 mm long.

Specimens examined: Twang forest Arunachal Pradesh. Field no. CIMAP, 10825.

Fl. & Fr.: October-December.

ACKNOWLEDGEMENTS

I thank Dr. S.P.S. Khanuja, Director, Central Institute of Medicinal and Aromatic Plants, Lucknow for providing all facilities during the survey. I feel obliged to Dr. D.K. Singh and Mrs. A. Mathur, Botanical Survey of India, Northern Circle, Dehradun for confirming the identity of the plant.

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33. *HERNIARIA CINEREA* DC. (CARYOPHYLLACEAE) – A NEW RECORD FOR INDIA¹

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¹Accepted February 6, 2004

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Genus *Herniaria* L., with 48 species (Mabberley 1997), is distributed mainly in Europe, Africa and Central Asia. Its eastward distribution is up to India, whereas westward it

extends up to South America. In India, the genus is represented by three species, namely *H. hirsuta* L., *H. incana* Lam. and *H. cachemiriana* Gay, distributed mainly in northern India

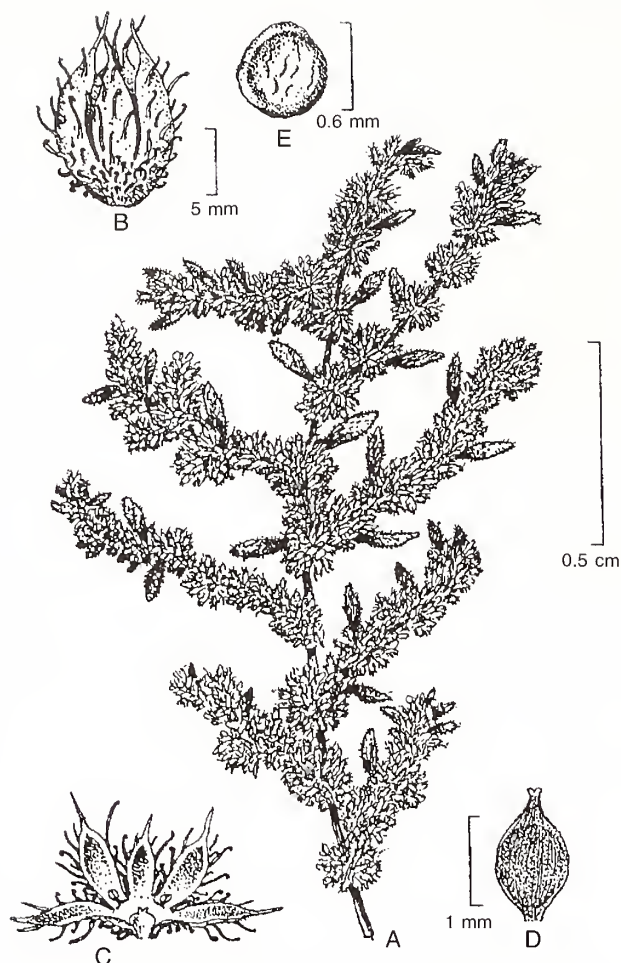


Fig. 1: *Herniaria cinerea* DC. (A-E): A. Habit; B. Flower; C. Dissected flower showing stamens and gynoecium; D. Fruit; E. Seed

(Majumdar 1993). Critical studies on the material of the genus housed in the herbarium of Botanical Survey of India, Dehradun (BSI) and perusal of relevant literature (Hooker 1885; Ghafoor 1973; Majumdar 1993) revealed the occurrence of a fourth representative of the genus, *H. cinerea* DC., hitherto unknown in India, thus extending its range of distribution further eastward. The species is described and illustrated as a new record for India, to facilitate its easy identification..

***Herniaria cinerea* DC.**, Fl. Fr. Suppl. 6: 375. 1815
(Caryophyllaceae) (Fig. 1)

Prostrate, hirsute herbs, 8-10 cm long, with spreading

branches. Leaves alternate to more or less opposite, sessile; lamina narrowly elliptic to elliptic-oblongate, 3-6 mm long, 0.8-1.5 mm wide, apex acute, margins entire, surfaces hirsute; stipules minute, membranous, margins ciliate. Flowers 5-12, in densely clustered pseudoaxillary cymes, bracteate; bracts minute. Flowers sessile pentamerous, yellowish green. Sepals 5, free, unequal; outer 2 comparatively longer, oblong, 1.5-2.1 mm long, obtuse, with non-membranous margins; inner three lanceolate, 1.5-1.9 mm long; outer surface in upper part covered with short or long, stiff, straight hairs mixed with uncinata hairs, perigynous zone externally densely covered with uncinata hairs. Petals 5, rudimentary, free, setaceous, alternating with sepals. Stamens 2, opposite to longer sepals, free; filaments minute; anthers oblong. Styles minute, bi-lobed; lobes shortly divergent. Fruits ovate, 1.4-2.1 mm long, with membranous pericarp, almost equal to or enclosed by calyx. Seeds subglobose, 0.6-0.75 mm in diameter, brown to brownish black.

Fl. & Fr.: February-March.

Specimen examined: INDIA: Haryana, Fatehabad, 16.ii.1963, N.C. Nair 26009 (BSI). Rare.

Distribution: INDIA: Haryana; Europe, Africa, Central Asia, Pakistan.

H. cinerea DC. can be easily distinguished from other Indian species of the genus in the presence of 5 unequal sepals (2 outer long, 3 inner short), with non-membranous margins and perigynous zone externally densely covered with uncinata hairs; stamens 2, situated opposite outer sepals.

While Hooker (1885) and Ghafoor (1973) have treated the genus under Family Illecebraceae, Majumdar (1993), following the family delimitation proposed by Cronquist (1981), has included the Family Illecebraceae under Family Caryophyllaceae. The same has been followed by Mabberley (1997).

ACKNOWLEDGEMENTS

We are grateful to the Director, Botanical Survey of India, Kolkata for facilities and encouragement. One of us (PKP) is also grateful to the Ministry of Environment and Forests, New Delhi for financial assistance under the Project 'Assessment of Floristic Diversity in Protected Area Network of India, Phase-I: The Biosphere Reserves & National Parks'.

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